



POLAROID  
ANNOUNCES  
COLOR  
FILM

# Polaroid Announces Color



You can now take color pictures with the Polaroid Land Camera.

Snap the shutter and 50 seconds later you peel out a finished color print.

The color is real, delicate, rich. The details are sharp. The picture is grainless.

To give you a color print in less than a minute (instead of the 1½ hours it takes in the laboratory), we practically had to invent color photography all over again. That gave us a chance to aim for the ideal qualities in a color film.

## PEOPLE LOOK LIKE PEOPLE

What do people want from the pictures they take, we asked ourselves. A green dress, a blue sky, a blaze of flowers captured vividly? That goes without saying. But mostly, people take pictures of people. Could we reproduce the most elusive colors of all: the delicate tones of the human skin? It wasn't easy, but we did it.

With Polacolor Film, skin tones are warm, luminous. Now you can capture even the delicate pink and ivory of a little girl's skin.

And you can do it whether your subject is standing in bright sunlight or in the soft light of a hazy day.

## SEVERAL HUNDRED INVENTIONS

For years, people have been asking, "When will Polaroid bring out color?" Actually, it was a tremendously complex job that required not one, but several *hundred* inventions. It took 15 years; work on color was started even before the black-and-white film was on the market.

Just imagine some of the problems that had to be solved.

It takes 22 steps to develop ordinary color film. First the negative: Develop, stop, harden, wash, bleach, wash, fix, wash, remove water droplets, dry. Then the positive: Develop, stop, fix, wash, bleach, wash, fix, wash, harden, wash, buff, dry. One hour and 33 minutes in the laboratory, not even counting the drying time.

How do you compress all this into 50 seconds and into a narrow space in the back of a dry camera? That was the question.

## A COMPLETELY NEW COLOR PROCESS

To do it, we had to come up with a completely new color process essentially unlike any that had ever existed before. What's different about the Polacolor system?

Just about everything.

In conventional color film, for instance, the dyes are actually manufactured in the developing process, after exposure. In Polacolor Film the dyes are right in the film, waiting to be released.

The key to this new film is an entirely new kind of molecule in which a developer is linked to a dye. By controlling the movement of the developer portion of the molecule, we determine which dyes stay in the negative and which reach the print to make your picture. It took years to learn how to synthesize these molecules. Even then, it took six weeks to develop just one of them. And we had to go through this process 2,500 times to find the three molecules that would work perfectly together to produce the colors we wanted.

## AN 8-STORY FACTORY ONLY HALF A HAIR HIGH

The resulting negative is rather like an 8-story factory made up of layers of these developers linked to dyes plus other layers which





PEOPLE LOOK LIKE PEOPLE *Whether in direct sun or shade, skin tones appear natural with the new Polacolor Film. At the same time, the bright colors (the red sweaters, the blue of the water and sky, the green of the foliage) are strong and pleasing. All of these pictures were engraved directly from 50-second originals.*





record the color message. Yet all these layers together occupy a space less than half the thickness of a human hair.

What goes on when you take a picture?

In the fraction of a second the shutter is open, the negative records and stores all the information it needs to reproduce the scene accurately in full color.

When you draw the film through the camera by pulling the tab, a developing jelly spreads through all the layers of the negative and the molecular factory is set in motion.

The negative starts escalating its color message up through the layers. Many millions of the linked developer and dye molecules are held back at exactly the right place in the negative. Many millions more are allowed to pass through all the layers to the print. All you have to do is count off the seconds while this incredibly complicated process puts the right dyes in the right place in precisely the right quantities at precisely the right time. In the final seconds, the surface of the print turns from alkaline to acid, and the dyes become imbedded in a layer of plastic that protects them and keeps them stable.

You draw out a finished print, sharp in detail and faithful to the most delicate shadings of color.

The whole process takes just 50 seconds. And the camera and film do all the technical work. You just sit back and admire your picture.

## NO COATING

Moments after it has been lifted from the camera, the surface of the picture hardens to a tough, luminous, lasting finish. The colors are protected from scratches and fingerprints. You don't even have to coat the picture as you do the black-and-white prints.

## COPIES AND ENLARGEMENTS

You can get all the copies you want directly from Polaroid Copy Service. And because Polacolor Film can give such sharp prints, they're excellent for enlargements — either in 5 x 7 or 8 x 10 sizes.

## FITS EXISTING CAMERAS

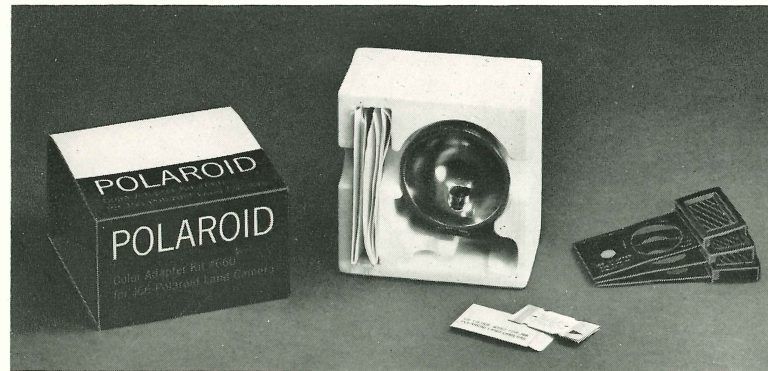
Polacolor Film is designed to be used in all Polaroid Land Cameras, going back to the first one we ever made — with one exception: the Models 80, 80A and 80B. Details about these cameras are available from Customer Service, Polaroid Corporation, Cambridge 39, Mass.

## NECESSARY ACCESSORIES

Since the base of Polacolor Film is tougher than that of black-and-white, a set of cutter bar "teeth" are needed to tear off the tab after each picture. They are available from your dealer — either in a Starter Pack with two rolls of Polacolor Film, or separately. Cutter bar teeth #274 (for non-locking cutter bars) and #274L (for locking cutter bars) fit the larger Land Camera models. The #273L fits Model J33. The Models 80, 80A and 80B will have teeth notched in the cutter bar at the factory. Note: a few Land Cameras manufactured late in 1962 have these teeth built into the cutter bar, hence this accessory is not needed for them.

**MODELS J66 AND J33 CAMERAS** There is a special Color Adapter Kit for each of these camera models. Each kit contains a plastic cover or "blind" which adapts the electric eye of the camera for the slower speed of color film; a special ultra-violet (UV) filter which improves color quality; and a J5 flash reflector which fits right over the built-in flashgun on the camera and makes it possible to use the more powerful M-3 (white) bulbs needed for the slower

*Color Adapter Kit #660*





speed of color. Both the blind and the reflector are easily removed for black-and-white pictures.

The Color Adapter Kit #660 is for J66 Cameras, the #330 Kit for J33 Cameras.

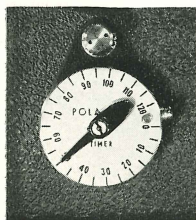
(See your dealer for these particular accessories. If for some reason they are not readily available, they may be purchased directly from Customer Service, Polaroid Corporation, Cambridge 39, Mass. The cutter bar teeth are 50 cents, the J66 and J33 Adapter kits are \$4.50 each. Be sure to indicate your camera model.)

## OPTIONAL (BUT USEFUL) ACCESSORIES

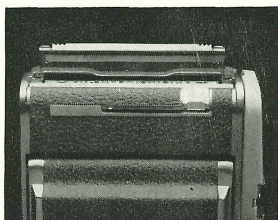
**POLAROID TIMER #120** This is very useful for the longer development time of color film — 50 seconds in most cases. It attaches right to the camera. You set it to the desired time, pull the tab and press a button on the timer. When it stops buzzing, your picture is ready.

**POLAROID EXPOSURE METER #625** Correct exposure is very important with color film. If your camera does not have an electric eye, this meter could easily pay for itself by preventing incorrectly exposed pictures. It clips right on the camera and gives accurate readings over a wide range of light. You simply point the meter at the scene, read a number, and then set that number on your camera.

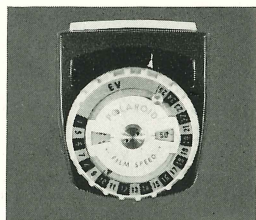
**POLAROID FLASHGUNS #281 AND #202** Most Land Camera owners have either a Polaroid Flashgun or a wink-light with an auxiliary Flasher. They can be used with the new Polacolor Film. If you do not have one, these flashgun models are currently available. Both use #25B (blue) bulbs for color. Model #281 fits those camera models that fire through the “shoe” connection at the top of the camera. Model #202 fits cameras that require a connecting cord.



*Timer #120*



*Cutter bar teeth on a Model 850*



*Exposure Meter #625*